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WHAT IS CLAIMED IS:

1. A peptide selected from a group consisting of:

- (a) $X_{01}X_{02}X_{03}$ GlulleGlnLeu X_{04} His $X_{05}X_{06}X_{07}$ Lys X_{08} (SEQ ID NO: 1),
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;
- (c) pharmaceutically acceptable salts thereof; and
- (d) N- or C- derivatives thereof;

wherein:

X_{01} and X_{03} are each an α -helix stabilizing residue,

X_{02} is Trp, Bpa, Arg or Val,

X_{04} is Met or Nle,

X_{05} is Gln, Deg or Asn,

X_{06} is Har or Leu,

X_{07} is α -helix stabilizing residue, Ala or Gly,

X_{08} is an α -helix stabilizing residue, Trp, Tyr or His; and

wherein said peptide binds selectively to the J domain of P1R.

2. The peptide of claim 1, wherein said α -helix stabilizing residue is selected from the group consisting of Ac₃c, Ac₃c, Deg, Aib or the desamino form of Ac₃c, Ac₃c, Deg, or Aib.

3. The peptide of claim 1, wherein said peptide is selected from:

- (a) Ac5cBpaAibGlulleGlnLeuMetHisGlnHarAlaLysTrp (SEQ ID NO:13);
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

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4. The peptide of claim 1, wherein said peptide is selected from:
- (a) $\text{Ac}_3\text{cValAibGluIleGlnLeuMetHisGlnHarAlaLysTrpNH}_2$
(SEQ ID NO: 14);
 - (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;
 - (c) pharmaceutically acceptable salts thereof; or
 - (d) N- or C- derivatives thereof.
5. The peptide of claim 1, wherein said peptide is selected from:
- (a) desamino $\text{Ac}_3\text{cValAibGluIleGlnLeuMetHisGlnHarAlaLysTrpNH}_2$ (SEQ ID NO: 15);
 - (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;
 - (c) pharmaceutically acceptable salts thereof; or
 - (d) N- or C- derivatives thereof.
6. The peptide of claim 1, wherein said peptide is selected from:
- (a) desamino $\text{AibValAibGluIleGlnLeuMetHisGlnHarAlaLysTrpNH}_2$ (SEQ ID NO: 16);
 - (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;
 - (c) pharmaceutically acceptable salts thereof; or
 - (d) N- or C- derivatives thereof.
7. The peptide of claim 1, wherein said peptide is selected from:
- (a) $\text{Ac}_3\text{cTrpAibGluIleGlnLeuMetHisGlnHarAlaLysTrpNH}_2$
(SEQ ID NO: 17);
 - (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11, 1-12 or 1-13;
 - (c) pharmaceutically acceptable salts thereof; or

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(d) N- or C- derivatives thereof.

8. The peptide of claim 1, wherein said peptide selected from:

- (a) Ac₃cBpaAibGluIleGlnLeuMetHisGlnHarAlaLysTrpNH₂
(SEQ ID NO: 18),
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,
1-12 or 1-13;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

9. The peptide of claim 1, wherein said peptide selected from:

- (a) Ac₃cArgAibGluIleGlnLeuMetHisGlnHarAlaLysTrpNH₂
(SEQ ID NO: 19),
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,
1-12 or 1-13;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

10. The peptide of claim 1, wherein said peptide selected from:

- (a) DegValDegGluIleGlnLeuMetHisGlnHarAlaLysTrpNH₂
(SEQ ID NO: 20);
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,
1-12 or 1-13;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

11. The peptide of claim 1, wherein said peptide selected from:

- (a) DegTrpDegGluIleGlnLeuMetHisGlnHarAlaLysTrpNH₂
(SEQ ID NO: 21);
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,

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1-12 or 1-13;

- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

12. The peptide of claim 1, wherein said peptide selected from:

- (a) DegBpaDegGluIleGlnLeuMetHisGlnHarAlaLysTrpNH₂
(SEQ ID NO: 22);
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,
1-12 or 1-13;

- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

13. The peptide of claim 1, wherein said peptide selected from:

- (a) Ac₃cTrpAibGluIleGlnLeuNleHisGlnHarAlaLysTyrNH₂
(SEQ ID NO: 23);
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,
1-12 or 1-13;

- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

14. The peptide of claim 1, wherein said peptide selected from:

- (a) Ac₃cBpaAibGluIleGlnLeuNleHisGlnHarAlaLysTyrNH₂
(SEQ ID NO: 24);
- (b) fragments thereof, containing amino acids 1-9, 1-10, 1-11,
1-12 or 1-13;

- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

15. A peptide selected from a group consisting of:

- (a) X₀₁BpaX₀₂GluIleGlnLeuX₀₃HisX₀₄X₀₅X₀₆LysX₀₇LeuAla

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SerValX₀₈ArgX₀₉ (SEQ ID NO: 6);

- (b) fragments thereof, containing amino acids 1-20, 1-19, 1-18, 1-17, 1-16 or 1-15;
- (c) pharmaceutically acceptable salts thereof; and
- (d) N- or C- derivatives thereof;

wherein

X₀₁ and X₀₂ are α -helix stabilizing residues,

X₀₂ is Aib, Gln, Deg or Asn,

X₀₃ is Met or Nle,

X₀₄ is Har or Leu,

X₀₅ is an α -helix stabilizing residue, Ala or Gly,

X₀₆ is an α -helix stabilizing residue (e.g. Aib) or Lys,

X₀₇ is an α -helix stabilizing residue, Trp or His,

X₀₈ is Arg or Glu and X₀₉ is Tyr or Met; and

wherein said peptide binds selectively to the J domain of P1R.

16. The peptide of claim 15, said peptide selected from:

- (a) DegBpaDegGluIleGlnLeuNleHisGlnHarAlaLysTrpLeuAlaSerValArgArgTyrNH₂ (SEQ ID NO: 25);
- (b) fragments thereof, containing amino acids 1-11, 1-12 or 1-13;
- (c) pharmaceutically acceptable salts thereof; or
- (d) N- or C- derivatives thereof.

17. The peptide of claim 1 or 15, wherein said peptide is labeled.

18. The peptide of claim 17, wherein said peptide is labeled with a fluorescent label.

19. The peptide of claim 17, wherein said peptide is labeled with a

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chemiluminescent label.

20. The peptide of claim 17, wherein said peptide is labeled with a bioluminescent label.

21. The peptide of claim 17, wherein said peptide is labeled with a radioactive label.

22. The peptide of claim 21, wherein said peptide is labeled with ^{125}I .

23. The peptide of claim 21, wherein said peptide is labeled with $^{99\text{m}}\text{Tc}$.

24. A competition binding assay to identify a PTH receptor ligand, which comprises contacting said receptor with a labeled peptide of claim 17 and a candidate receptor ligand, and measuring the label bound to the receptor.

25. A competition binding assay to analyze a PTH receptor ligand, which comprises contacting said receptor, or fragments or derivatives thereof, with a labeled peptide of claim 17 and a candidate receptor ligand, and measuring the label bound to the receptor.

26. A pharmaceutical composition comprising the peptide of claim 1 or 15, and a pharmaceutically acceptable carrier.

27. A method for treating mammalian conditions characterized by increased activity or production of PTH or PTHrP, said method comprising administering to a subject in need thereof an effective inhibitory amount of a peptide of claim 1 or 15.

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28. A method for treating mammalian conditions characterized by increased activity or production of PTH or PTHrP, said method comprising administering to a subject in need thereof an effective inhibitory amount of a composition comprising a peptide of claim 1 or 15 and a pharmaceutically acceptable carrier.

29. The method of claim 26 or 27, wherein said condition to be treated is hypercalcemia.

30. The method of claim 28, wherein said condition to be treated is malignant hypercalcemia.

31. The method of claim 26 or 27, wherein said effective amount of said peptide for increasing bone mass is from about 0.01 $\mu\text{g/kg/day}$ to about 1.0 $\mu\text{g/kg/day}$.

32. The method of claim 26 or 27, wherein the method of administration is parenteral.

33. The method of claim 26 or 27, wherein the method of administration is subcutaneous.

34. The method of claim 26 or 27, wherein the method of administration is nasal insufflation.

35. A method of making the peptide of claim 1 or 15, wherein said peptide is synthesized by solid phase synthesis.

36. The method of making the peptide of claim 1 or 15, wherein said peptide is protected by FMOC.